



The City of San Antonio Irrigation Standards were implemented on January 7, 2002, and amended April 4, 2002, and is enforced by the Development Services Department.

The primary purpose of the ordinance is to establish *best management practices (BMPS)* for adoption by irrigation designers and contractors for the purpose of promoting urban water conservation through efficient design, installation and consumer education.



In ground irrigation systems for commercial properties are required to have a separate water meter.

A Texas Licensed Irrigator shall design the system to be site specific as to the requirements of the landscape plan. This will help the conservation of our water; maximize health and appearance of the landscape.

## IRRIGATION SUBMITTAL REQUIREMENTS

Three copies of the **irrigation plan** and **letter of conformity** sealed by a licensed irrigator is required with the submittal of all landscape plans that require a building permit.

## DESIGN REQUIREMENTS

### \* Pressure

- (a) System to be designed to the lowest static pressure available during a 12-month period
- (b) If static pressure exceeds design pressure by 15 PSI or more in any zone, a flow control device shall be installed
- (c) Pressure at any point within a zone shall not vary by more than 10% from the design sprinkler operating pressure

### \* Provide Separate Zoning for

- (a) Turf
- (b) Plants with dissimilar watering requirements
- (c) Areas with greater or lesser sun exposure
- (d) Slopes from flat/level areas (topographic information is required)
- (e) Trees (bubblers)

#### NOTE:

Trees are planted deeper than turf or shrubs requiring slow, deep watering. Adjusting water flow as trees become established is beneficial.

### \* Sprinkler Head Placement

- (a) Sprinkler head spacing shall not exceed 50% of spray diameter (typical arc of coverage required)
- (b) Head placement should make allowance for local wind condition, size of areas water (prevailing wind arrow required)
- (c) Trim perimeters with correct arc and radii selection to eliminate water thrown onto non-landscape areas ie. sidewalks, buildings etc...

### \* Landscape water schedule

Produce a water schedule for the landscape at a maximum of 80% ET (evapotranspiration) as determined by the local ET.

## EQUIPMENT REQUIREMENTS

### \* Controller



- (a) On/off rain switch or other rain shut-off device that does not alter program
- (b) Multiple programming capabilities
- (c) Controller capable of a minimum of 3 cycles per program

#### NOTE:

Irrigation of heavy clay soils and /or slopes benefit by scheduling the system to cycle twice allowing water to percolate before the point of run off.

### \* Backflow Device

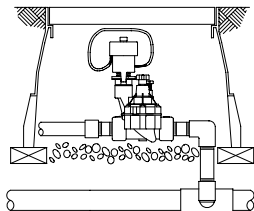
All irrigation systems connected to a public or private potable water supply must be properly connected through a backflow prevention device



Requirements of Texas Administrative Code Title 30 Chapter 344.

### \* Valves

Flow control devices on all remote control valves including the master valve



### \* Sprinklers

(a) Use of low-angle heads is encouraged



(b) Pop-up sprinklers and shrub risers will be at a height to clear turf, trees, shrubs, other planting and objects such as fences, allowing no obstruction of spray pattern

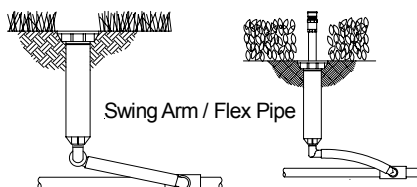


(c) Pop-up type shrub risers should be used in areas where pedestrian/auto traffic may occur. Drip irrigation should be used in areas between the curb and sidewalk and parking lot areas where over-spray onto pavement may occur in accordance with manufacturer's recommendations.

(d) Low head drainage is to be eliminated or minimized through design or by use of check valves



(e) Sprinkler heads shall be attached to rigid lateral lines with flexible material, swing joints to reduce potential for breakage



## CERTIFICATE OF OCCUPANCY REQUIREMENTS

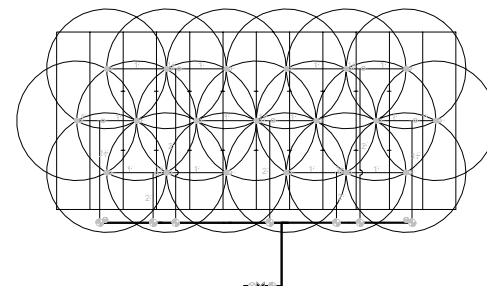
### \* Final Inspection

No certificate of occupancy shall be issued for the occupancy of a new or altered building unless the plant and screening materials required by the approved landscape plan and the approved irrigation plan have been properly installed and inspected. Call 207-1111 for inspections.

### \* Compliance Letter

A letter from a Licensed Irrigator shall be required certifying that the irrigation system was installed in accordance with the approved irrigation plan prior to the issuance of a certificate of occupancy. This letter shall be placed with the Test & Measure report in a weatherproof bag that will be collected by the building official.

## IRRIGATION STANDARDS



### LEGEND

	QUANTITY	
BACKFLOW PREVENTION DEVICE	1	MAINLINE PIPE: CLASS 200 PVC, (6 INCH SIZE)
MAIN SHUT-OFF VALVE	1	LATERAL PIPE: CLASS 200 PVC, (6 INCH SIZE)
RAIN BIRD ELECTRIC REMOTE CONTROL VALVE, (SIZED AS SHOWN)	9	INDICATES LATERAL DISCHARGE IN GPM
RAIN BIRD SLIC QUICK COUPLING VALVE	2	INDICATES CONTROLLER AND CONTROLLER STATION NUMBER
RAIN BIRD FALCON 8504 W/12 NOZZLE, PRESSURE = 60 PSI, HEAD = 17 FEET, FLOW = 12.2 GPM	19	INDICATES REMOTE CONTROL VALVE SIZE



CITY OF SAN ANTONIO

DEPARTMENT  
OF  
DEVELOPMENT SERVICES

For more information contact  
Development Services Department  
P.O. Box 839966, 1901 South Alamo St.,  
San Antonio, TX 78283-3966  
Tel#(210) 2071111 Fax # (210) 207-6073  
Website: [www.sanantonio.gov/dsd](http://www.sanantonio.gov/dsd)